



# San Bernardino Valley Municipal Water District

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June 2, 2006

VIA ELECTRONIC AND U.S. MAIL

Mr. Gerard J. Thibeault, Executive Officer  
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Mr. David Woelfel, Staff Environmental Scientist  
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California Regional Water Quality Control Board,  
Santa Ana Region  
3737 Main Street, Suite 500  
Riverside, CA 92501-3348

Re: 2006 Triennial Review of the Water Quality Control  
Plan - Santa Ana River Basin

Gentlemen:

San Bernardino Valley Municipal Water District (District), and numerous water agencies within the District, including but not limited to Bear Valley Mutual Water Company and Crafton Water Company, are pleased that you have provided the public with this opportunity to comment on the proposed 2006 Triennial Review of the Water Quality Control Plan - Santa Ana River Basin.

The District and the water agencies are most interested in the issues numbered 13 in the Initial Draft 2006 Triennial Review Priority List. The District and the water agencies actively participated with Southern California Edison Company, numerous environmental agencies and environmental organizations in the nearly decade-long United States Federal Energy Regulatory Commission (FERC) collaborative process associated with FERC's relicensing of Southern California Edison Company's Lytle Creek, Santa Ana River and Mill Creek facilities. FERC issued a Final Environmental Assessment (Final EA) in late 2002 as a part

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of the relicensing procedure. The Final EA summarized available peer-reviewed scientific literature and summarized and incorporated the voluminous scientific record compiled by the water agencies, Southern California Edison Company, environmental agencies and environmental organizations during the collaborative relicensing process. Consequently, the Final EA represents the best available summary of the current environmental conditions on Lytle Creek, the Santa Ana River and Mill Creek.

During 2003 and 2004, representatives of the District and the other water agencies met with Regional Board staff to discuss incorporation of the information from the FERC Final EA and the FERC licenses into the water quality control plan for the Santa Ana River basin. Specifically, we asked that the designated beneficial uses of certain stream reaches on Lytle Creek, Santa Ana River, and Mill Creek be revised to reflect the findings of the Final EA that, in these reaches, these streams flow only intermittently and only can support warm water aquatic biota. However, in our review of the Triennial Review Priority List, this goal is conspicuously absent. The District and the water agencies respectfully request that this goal be added to the Triennial Review Priority List with a high priority.

The District and the water agencies fully understand the limits on the Regional Board's staff and fiscal resources. One of the reasons we believe redesignating the beneficial uses of certain stream reaches on Lytle Creek, Santa Ana River and Mill Creek to reflect the findings in the Final EA should be assigned a high priority on the Triennial Review Priority List is that we concur with the Regional Board's view that this action can be accomplished with limited staff resources (0.1 person-year). The Final EA, as noted above, summarizes the available evidence well and could serve as the basis for action by the Regional Board. We enclose a letter to the District from Roy Leidy, a fisheries biologist with the consulting firm of EIP, a division of PBS&J, who participated in the entire FERC process on behalf of the District, that outlines the manner in which the evidence summarized in the Final EA would allow the Regional Board to redesignate the beneficial uses


Gerard Thibeault  
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in certain segments of Lytle Creek, Santa Ana River and Mill Creek.

The District and the water agencies are also concerned about numerous issues in the Triennial Review Priority List. A list of these issues is attached for your information. We look forward to discussing these issues with you during the Triennial Review process.

Finally, the District and the water agencies appreciate the Regional Board's effort to involve interested parties in the Triennial Review process. We support the Regional Boards' effort to foster an open discussion of the issues posed for discussion as part of that process and request that we be notified of all subsequent meetings and proposals relating to the Triennial Review process. In particular, we very much support the Regional Board's focus on ensuring that the Basin Plan is based upon the best available scientific information describing conditions in the Santa Ana River watershed; conditions that often differ from those in other watersheds in California.

Very truly yours,



Robert L. Reiter  
General Manager and  
Chief Engineer

Enclosures

### List of Issues

The District and the water agencies, including but not limited to Bear Valley Mutual Water Company and Crafton Water Company, are specifically interested in the following issues:

*Issue Number 4. Reformat / republish Basin Plan to incorporate.*

Resolution Number R8-2006-0042 and Order Number R8-2006-0005 should NOT be incorporated into the Basin Plan. Doing so will short-cut the collaborative process that is just now beginning and would likely subject the Regional Board to immediate litigation.

*Issue 13 Update Beneficial Use Table 3-1.*

*Issue 13.1 b. Add RARE to appropriate waters. How is the determination of "appropriate waters" to be made? Does the determination apply to an entire reach as designated in the Basin Plan or only where the specific use presently exists? How will the reaches, creeks and streams be identified for localized designations?*

*Issue 13.1 c. Add SPAWN (SPWN in the current Basin Plan) to appropriate waters. How is the determination of "appropriate waters" to be made? Does the determination apply to an entire reach as designated in the Basin Plan or only where the specific use presently exists? How will the reaches, creeks and streams be identified for localized designations?*

*Issue 13.2. Add new reaches and designate appropriate beneficial uses. These issues are also discussed in the enclosed copy of Roy Leidy's letter dated 22 December 2003.*

*Issue 13.2. a. Lytle Creek from I-15 to Turk Point or Miller Narrows - change to I-COLD and list as Reach 1. In the FERC collaborative process, the reach of Lytle Creek from I-15 to Turk Point was found typically to be dry and so should not have a designated beneficial use. The reach from Turk Point to Miller Narrows was identified to be too*

warm for trout during many seasons of the year. The classification should be I-WARM. Further, if this reach is named Reach 1, how do you identify the reaches of Lytle Creek extending from its confluence with Warm Creek to Turk Point?

*Issue 13.2. b. Mill Creek from SAR to Highway 38 - list as Reach 1.* This reach is presently shown in Table 3-1. The reach includes a beneficial use of I-COLD. This reach should be designated with a beneficial use of I-WARM.

*Issue 13.2. c. Mill Creek from Highway 38 to above Mountain Home Village - list as Reach 2.* The decommissioning of Mill Creek Powerhouse Number 2 has resulted in this reach being used as a conveyance facility to move water produced from wells near Mountain Home Village to the Mill Creek streamflow pickup at the Highway 38 bridge. The well production may be terminated at any time. This reach would then likely dry up. This reach should be designated as I-WARM.

*Issue 13.2. d. Mill Creek from Mountain Home Village to upper diversion, Forest Falls - change to I-COLD and list as Reach 3.* This reach was determined to be too warm for trout in the summer season and is frequently dry. The beneficial use listing should be I-WARM.

*Issue 13.2. e. Mill Creek upper diversion to headwaters.* This reach should be designated I-COLD.

*Issue 13.2. f. SAR from Seven Oaks Dam to Power House 1.* This reach should be designated I-WARM.

*Issue 13.2. g. SAR from Power House 1 to headwaters - list as Reach 7.* This reach should be designated COLD.

The District and the water agencies are also interested in a number of other issues listed in the Triennial Review Priority List. Our interest in these issues stems from the general descriptions of these issues and the far-reaching potential implications of these issues. We seek further clarification of the Regional Board's intent with regard to

each of these issues, the nature of the problem to be addressed, and other relevant information.

*Issue 17. Add narrative on implementation procedures for narrative turbidity and toxicity objectives.*

*Issue 19. Revise Chapter 3 Beneficial Use tables narrative to incorporate Tributary Rule.*

*Issue 20. Consider revisions to make clear that water quality standards apply to intermittent surface waters, as well as perennial waters.*

*Issue 25. Update the discussion of implementation of the antidegradation policy in Chapter 2 to address non-point source pollution.*

*Issue 26. Reevaluate temperature criteria to ensure full protection of aquatic life.*

*Issue 27. Update dissolved oxygen objectives for WARM/COLD beneficial uses.*

*Issue 29. Revise fluoride WQO to be consistent with Basin Plans of RB4 & 9, and with DHS and Federal MCLs.*

*Issue 30. Develop and adopt biological criteria for managing water quality.*

*Issue 32. Review Methylene Blue-Activated Substances (MBAS) water quality objective for surface waters.*



22 December 2003

Robert L. Reiter  
General Manager and Chief Engineer  
San Bernardino Valley Municipal Water District  
P. O. Box 5906  
San Bernardino, CA 92412-5906

Dear Bob:

This letter responds to your request for my thoughts on the proposal by the California Regional Water Quality Control Board for the Santa Ana Region ("CRWQCB") to "[d]esignate new reaches of existing streams to more accurately assign beneficial uses," which the CRWQCB adopted on July 19, 2002. The CRWQCB proposes to change the designations of Lytle Creek from Miller's Narrows downstream to I-15, Santa Ana River from the Santa Ana River Powerhouse No. 1 river pickup unit downstream to Seven Oaks Dam, and Mill Creek from the Mill Creek No. 3 diversion dam downstream to Highway 38.

The CRWQCB's proposal is a good idea. As discussed below, there is no scientifically justified basis for the current designated uses in the reaches identified by the CRWQCB. This conclusion is illustrated by the Federal Energy Regulatory Commission's ("Commission") September 24, 2002 Final Environmental Assessment ("Final EA") for Southern California Edison's ("SCE") application for the Lytle Creek, Santa Ana River 1/3, and Mill Creek 2/3 hydroelectric project licenses. The Final EA summarizes approximately ten years of investigations and reports describing the habitat for fish in Lytle Creek, Santa Ana River and Mill Creek. Based upon the findings in the Final EA, the Commission issued SCE licenses for these three hydroelectric projects earlier this year.

#### *Lytle Creek*

Currently, Lytle Creek from Miller's Narrows downstream to I-15, is designated "cold." As now licensed, during the low-flow spring through fall period, approximately 3 cfs of leakage and accretion provides flow in the Lytle Creek bypass reach downstream of the Lytle Creek diversion at Miller's Narrows. The bypass reach becomes intermittent each year during the summer and fall period from the vicinity of the Korean Christian Camp downstream to I-15. Stream temperature modeling for Lytle Creek indicated that: "none of the flow alternatives would enable SCE to maintain the 'COLD' temperature objective of 68 degrees F year-round. Only at flows of 20 cfs would this temperature objective be approached." Final EA at 90. Moreover, the Commission concluded that leakage and low flows (e.g., 3 cfs) favor reproduction and habitat protection for the Santa Ana speckled



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dace, a rare fish recognized by the California Department of Fish and Game as a fish species of "special concern." Final EA at 90-91. Because the reach from Miller's Narrows to Turk's Point cannot achieve the "cold" temperature objective, but can support the Santa Ana speckled dace, it should be designated "intermittent cold/warm." For similar reasons, the still-warmer reach from Turk's Point to I-15 should be designated "intermittent warm."

#### *Santa Ana River*

Under SCE's recently-issued license, flows in the Santa Ana River from the Santa Ana River Powerhouse No. 1 (SAR 1) river pickup unit downstream to Seven Oaks Dam, during the spring through fall period, consist of leakage from the powerhouse and limited groundwater accretion from cienegas. Except for the cienegas, the reach between the powerhouse and dam is dry during the summer through fall period. This reach is currently designated "cold." The Final EA provides that "[i]t is uncertain whether releasing flows of 12 to 15 cfs during warm periods would be sufficient to maintain water temperatures in the stream reach [between Alder Creek and Seven Oaks Dam] below SWRCB's "cold" water temperature criteria of 68 degrees F." Final EA at 101. In fact, the available data indicate that 68 degrees could not be maintained throughout the reach unless the Santa Ana River 1/3 Project were decommissioned and no water was diverted at SAR 1 to the Greenspot Pipeline.

Moreover, such increased flows "would only benefit fish in the 2,000-foot-long stretch [just downstream of the SAR1 river pickup unit] not subject to inundation by waters from the Seven Oaks dam. Fish populations in this segment are small and concentrated in cienegas during low-flow periods." Final EA at 228. The current leakage flows are more than ample to protect these existing small populations of rainbow and brown trout, as well as the existing streamside riparian habitat. Final EA at 228. Thus, there is no biological basis for the "cold" designation of the reach of the Santa Ana River from the SAR 1 river pickup unit downstream to Seven Oaks Dam. The CRWQCB should change the designated use of that reach to "intermittent warm" to reflect current conditions.

#### *Mill Creek*

Currently, Mill Creek from the Mill Creek No. 3 diversion dam just upstream of the Forest Falls road, downstream to the Highway 38 bridge, is designated "cold," while the reach from the Highway 38 bridge downstream to the confluence with the Santa Ana River is designated "intermittent cold." Evapotranspiration and percolation, as well as the steep gradient, moderate-to-high velocities, large boulders, lack of riparian vegetation, and channel instability resulting from frequent flash floods make the Mill Creek reach above





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Highway 38 unsuitable for sustaining a fishery. Final EA at 107-08, 234. The California Department of Fish and Game, recognizing this fact, no longer stocks fish in this reach.

The Commission concluded that "[f]lows adequate to maintain SWRCB temperature objectives for species in streams designated as 'COLD,' if attainable, would slightly enhance habitat conditions for fish resources in Mill Creek." Final EA at 107. In order to attain this "cold" designation, though "stream temperature modeling also showed that predicted water temperatures to meet current SWRCB standards would require flows of at least 20 cfs. Upstream of the diversion dam, median average monthly flows range from about 21 to 33 cfs during the year. Based on our analysis, even if a portion or all flow is diverted into the bypassed reach, there would not be enough surface water in the bypassed reach to maintain temperatures within the SWRCB criteria in certain years without a substantial loss in power generation." Final EA at 108. Even then, if these flows are insufficient to maintain adequate surface flows on a year-round basis, they could result in fish stranding in warm, isolated pools as flows subside and water percolates into the alluvium. Final EA at 107. For these reasons, Mill Creek from the Mill Creek No. 3 diversion dam near Forest Fall road downstream to the Highway 38 bridge should be designated "intermittent cold/warm." As with Lytle Creek and the Santa Ana River, lower stream segments are generally warmer than upper segments. That is also the case with Mill Creek and so the reach from the Highway 38 bridge downstream to its confluence with the Santa Ana River should be designated "intermittent warm" to reflect current conditions.

Attached for your records is a copy of the Final EA. Please call if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Roy".

Roy Leidy  
Director, Fisheries and Aquatic Sciences

Attachment: Final EA

FINAL  
MULTIPLE PROJECT  
ENVIRONMENTAL ASSESSMENT  
FOR HYDROPOWER LICENSES

Santa Ana River Projects

Lytle Creek Hydroelectric Project  
FERC Project No. 1932-004

Santa Ana River 1 and 3 Hydroelectric Project  
FERC Project No. 1933-010

Mill Creek 2/3 Hydroelectric Project  
FERC Project No. 1934-010

California

**Federal Energy Regulatory**

**Commission**

Table 6. Rainbow trout WUA predictions for proposed flows in Lytle Creek.<sup>a</sup>  
(Source: EA, 1995)

Flow <sup>b</sup> (cfs)	Adult		Juvenile		Fry	
	WUA	% of Maximum	WUA	% of Maximum	WUA	% of Maximum
20	1,793	99	3,707	93	2,410	68

<sup>a</sup> WUA results are expressed as square feet per 1,000 feet of river.

<sup>b</sup> Flow is measured at the IFIM transects. Additional flow would need to be released at the diversion dam to account for percolation and any flow lost to pumping from wells along the bypassed reach.

With flows of 6 cfs, as recommended by FWS, CDFG, and California Trout, the habitat would increase for adult and juvenile life stages of Santa Ana speckled dace, but also would decrease habitat for reproductive life stages of dace (table 5) to sub-optimal (less than 80 percent maximum WUA). For rainbow trout, increasing flows to 6 cfs also would increase habitat for all life stages (table 6).

In 1992, stream temperature modeling for Lytle Creek indicated that under a 5-cfs release, water temperatures were predicted to peak at 77 degrees F at the lower end of the Lytle Creek system from August 15 through 19. The majority of predicted values were below approximately 70 degrees F, which is below the upper incipient lethal temperature limit of 77 degrees F considered suitable for rainbow trout (Raleigh et al., 1984) and most likely, below lethal temperatures for speckled dace. Under flow scenarios of 10 and 15 cfs, predicted temperatures exceeded 68 degrees F during much of July and August. At 20 cfs, predicted temperatures were maintained below 68 degrees F, which is the SWRCB maximum temperature criteria for coldwater species. SCE determined that riparian shading and ambient air temperature were the two main variables that affected stream temperature. Based on these data, we conclude that none of the flow alternatives would enable SCE to maintain the "COLD" temperature objective of 68 degrees F year-round. Only at flows of 20 cfs would this temperature objective be approached. At 20 cfs, habitat for Santa Ana speckled dace reproduction, Santa Ana speckled dace juveniles, and rainbow trout fry would be sub-optimal.

Santa Ana speckled dace reproduction habitat is much less common than for juvenile or adult (table 5) and may limit populations of this species in Lytle Creek. Leakage and low (e.g., 3 cfs) flows would favor reproduction of this FS sensitive

species. Although flows up to 6 cfs or higher would enhance juvenile and adult speckled dace and rainbow trout fry habitat, it would create sub-optimal conditions for the reproduction life stage of speckled dace.

Because our flow recommendation would affect other environmental resources and the economics of the projects, we make our final recommendation in section VII, *Comprehensive Development*.

### **Stream Channel Modification and Effectiveness Monitoring Plan**

SCE proposes and FS and SWRCB recommend a plan for stream channel modifications to redirect leakage flows into a single channel on the west side of the bypassed reach. FS also recommends a plan for monitoring the effectiveness of the stream channel modifications.

#### *Our Analysis*

We have reviewed information about the hydrology and geomorphology of the Lytle Creek streambed and agree with SCE, FS, and SWRCB that the use of a single channel along the west side of the bypassed reach would be less prone to flood events and would retain more surface water because percolation rates are lower along the western edge. We also would expect a relatively stable channel with more surface water to promote riparian growth along the channel, potentially providing some shading along portions of the channel and aiding in the maintenance of cooler water temperatures. However, we would not expect any substantial improvement in water temperature as a result of directing leakage flows into the re-established channel. Although the fish surveys conducted by SCE and FS demonstrate that small populations of Santa Ana speckled dace and rainbow trout persist in the bypassed reach and seem to tolerate temperatures at the upper limit of tolerance (for rainbow trout), SCE's proposal to continue existing leakage flows would be likely to enhance habitat for these species as a result of redirecting flows into a single channel. By increasing the proposed flow from leakage to 3 cfs or inflow, whichever is less, there would be more water available in either the channel or the existing streambed.

The Lytle Creek Basin is prone to flooding and to channelization, especially in the vicinity of the Turk's Basin segment. Flood events have resulted in a braided and unstable streambed. During flood events, higher-velocity flows spread out in the basin and seek other channels. Fish would be expected to be transported downstream by the

**SAR 3 Bypassed Reach**—SCE and the Water Rights Owners note that only a short stretch of the SAR 3 bypassed reach, about 1,685 feet long, is not subject to inundation due to the construction and operation of Seven Oaks dam. The dam and the subsequent impoundment of floodwaters have permanently altered this reach, which is approximately 17,400 feet long. SCE proposes no change in flow that would be release to the SAR 3 bypassed reach. Natural leakage and accretion in the bypassed reach have proven to be sufficient to sustain small populations of brown trout and rainbow trout for many years. However, some segments of SAR 3 bypassed reach are dry during some years. For our analysis, we reviewed information on stream gradient, stream length, historical flows, and existing fish abundance data, and IFIM studies conducted for the upper portion of the former SAR 2 bypassed reach, which is now the uppermost portion of the SAR 3 bypassed reach.

A year-round release of at least 12 cfs in the SAR 3 bypass reach recommended by CDFG and FWS likely would enhance habitat conditions for juvenile and adult rainbow trout in the 2,000-foot-long section of SAR 3 that is not expected to be inundated by waters from Seven Oaks dam. Portions of this unaffected reach are periodically dry under current conditions.

Stream temperatures generally increase as water moves downstream from the upper reaches of the Santa Ana River. As water reaches the SAR 3 bypassed reach, stream temperatures approach the upper limits of what is generally considered optimal for rainbow trout, especially during summer (FS, 2000). It is uncertain whether releasing flows of 12 to 15 cfs during warm periods would be sufficient to maintain water temperatures in the stream reach below SWRCB's "COLD" water temperature criteria of 68 degrees F. Although we recognize the value of providing flows that are optimal for resident trout in the SAR 3 reach, we suggest that other environmental factors in the region in addition to flow also determine trout abundance and distribution, such as available spawning habitat, interaction with exotic species, water temperatures, substrate type, and the presence of riparian vegetation. We conclude, based on our review of the site, that the Seven Oaks dam could create conditions that would foster the introduction of non-native smallmouth bass. If smallmouth bass successfully move upstream of the SAR 3 bypassed reach, they would most likely compete with wild trout and other native fish species in the mainstem and tributaries of the Santa Ana River (see our following discussion of fish barriers). Increased flow to the SAR 3 bypassed reach could facilitate upstream dispersal of non-native fish. Destruction of riparian vegetation and increased sedimentation from Seven Oaks dam is expected to substantially alter habitat conditions for rainbow trout in most of the SAR 3 reach. Given the potential limitations, it is

non-native rainbow trout associated with off-channel cienegas. A small wild trout population in the Mountain Home Creek tributary also exists and could contribute an occasional fish to the Mill Creek fishery. However, repeated attempts by CDFG to stock fish in the unimpaired reaches of Mill Creek above the Mill 3 diversion dam have not succeeded in establishing a self-sustaining fishery.

Perennial flow analysis conducted by SCE and USGS show that Mill Creek has the potential to stop flowing at locations within the bypassed reach during very low-water years; cessation of flow in the bypassed reach could cause fish to be concentrated into existing wetted areas or stranded on dry streambeds. SCE concludes that with current pumping operations, even the release of the entire inflow at the diversion dam may not be enough to maintain flow in the Mill Creek bypass during the dry season. In addition to groundwater pumping in the immediate region of Mill Creek, SCE's recent fate-of-flow analyses indicate a flow between approximately 2 to 4 cfs is lost to percolation (SCE, 2001c). Evapotranspiration and other natural factors also are expected to cause surface flows in Mill Creek to decrease in the bypass reach. We reviewed SCE's and the Water Rights Owners' analyses and agree with their conclusions.

Stable streamflows in the bypassed reach would allow populations of rainbow trout to persist throughout the Mill Creek bypass during most years, but achieving those stable flows is unlikely because of factors beyond the control of SCE and the Commission. Recommended minimum flow releases of 6 and 7 cfs would not result in a substantial amount of surface water in Mill Creek due to evapotranspiration and percolation into alluvium in the streambed, and would not be expected to enhance long-term habitat conditions for rainbow trout over existing conditions. The minimum flows recommended by others may temporarily and slightly enhance habitat conditions for rainbow trout in Mill Creek. If these flows are insufficient to maintain adequate surface flows on a year-round basis, they also could result in fish stranding in warm, isolated pools as flows subside and water percolates into the alluvium.

Flows adequate to maintain SWRCB temperature objectives for species in streams designated as "COLD," if attainable, would slightly enhance habitat conditions for fish resources in Mill Creek. Bypassed reach stream temperature modeling results suggest predicted temperatures for released flows of 5, 10, 15, and 20 cfs would peak at approximately 72 degrees F to 75 degrees F during July and August, but remain at or below approximately 70 degrees F for the remainder of the time, which is within documented tolerance ranges for rainbow trout and speckled dace. Flows of 10 cfs, higher than flows proposed by any party, still would result in water temperatures of 75

degrees F in August. This temperature is considered to be lethal for rainbow trout. The stream temperature modeling also showed that predicted water temperatures to meet current SWRCB standards would require flows of at least 20 cfs. Upstream of the diversion dam, median average monthly flows range from about 21 to 33 cfs during the year. Based on our analysis, even if a portion or all flow is diverted into the bypassed reach, there would not be enough surface water in the bypassed reach to maintain temperatures within the SWRCB criteria in certain years without a substantial loss in power generation.

As flows at SCE's IFIM transects at the Mill 2 and Mill 3 bypassed reaches approach 3 or 4 cfs, physical habitat for rainbow trout adult and fry becomes optimal (tables 10 and 11). Juvenile rainbow trout physical habitat first becomes optimal in both stream segments at 5 cfs. SCE's proposal to remove the Mill 2 diversion would continue

Table 24. Analysis of fish and wildlife agency recommendations for the SAR 1 and 3 Project. (Source: Staff)

Recommendation	Agency	Subject to Section 10(j)	Annual cost	Conclusion
12. Complete a biological assessment and ESA requirements prior to license issuance.	FWS	No <sup>a</sup>	\$0	Adopted. We consider this EA to represent our biological assessment.

<sup>a</sup> Not a specific measure considered under Section 10(j) of the FPA to mitigate, protect, or enhance fish and wildlife resources.

#### Minimum Flows in the SAR 3 Bypassed Reach

We did not adopt FWS's and CDFG's recommendation that SCE release a year-round flow of 12 cfs into the SAR 3 bypassed reach. The agencies recommend flows that are within the range of 7 to 18 cfs suggested by the IFIM as optimal for trout habitat in the Santa Ana River. However, the recommended flows would only benefit fish in the 2,000-foot-long stretch of reach not subject to inundation by waters from the Seven Oaks dam. Fish populations in this segment are small and concentrated in cienegas during low-flow periods. Other factors, including limited spawning habitat, interaction with exotic species, water temperatures, substrate type, and the presence of riparian habitat, would limit increases in abundance of trout in this segment of the bypassed reach. We conclude that, even with flows of 12 cfs, abundance of rainbow trout would not significantly increase in this segment. FWS's and CDFG's 12 cfs would decrease annual generation by 3,120,000 kWh compared to existing conditions. We estimate that the capital, O&M, and lost energy costs associated with releasing 12 cfs into the SAR 3 bypassed reach would decrease the net annual benefit of the project by \$241,880. The cost of releasing 12 cfs is not warranted based on the limited ecological benefit. We conclude that our recommended leakage flows into the SAR 3 bypassed reach would protect the existing small populations of rainbow trout, as well as the existing streamside riparian habitat. Therefore, we find that FWS's and CDFG's recommendation may be inconsistent with the comprehensive planning standard of Section 10(a) of the FPA, including the equal consideration provision of Section 4(e) of the FPA. At the 10(j) meeting, we agreed to disagree on this issue.



We did not adopt FWS's and CDFG's recommendations that SCE release a year-round flow of 7 cfs and 6 cfs, respectively, into the Mill 3 bypassed reach. The steep gradient, moderate-to-high velocities, large boulders, lack of riparian vegetation, and channel instability resulting from frequent flash floods that characterized the Mill 3 bypassed reach make the reach unsuitable for rainbow trout. Rainbow trout would be expected to prefer the habitat above the Mill 3 diversion; however, CDFG has been unable to establish a self-sustaining fishery in the unimpaired reach above the diversion dam and has discontinued stocking upstream of the diversion dam. Although Interior's and CDFG's recommended flows would provide 90 to 100 percent of the maximum available habitat for various life stages of rainbow trout (see table 10), these recommended flows would decrease annual generation by 7,149,000 and 6,010,000 kWh, respectively, compared to existing conditions. We estimate that the capital, O&M, and lost energy costs associated with releasing 7 cfs and 6 cfs into the Mill 3 bypassed reach would decrease the net annual benefit of the project by \$240,100 and \$194,540, respectively. The high cost of releasing either flow is not warranted based on the expected benefit to fish and riparian habitat. We conclude that our recommended leakage flows between 1 and 2 cfs into the Mill 3 bypassed reach would be sufficient to maintain the existing small populations of non-native rainbow trout in the cienegas and in Mountain Home Creek. Therefore, we find that FWS's and CDFG's recommendation may be inconsistent with the comprehensive planning standard of Section 10(a) of the FPA, including the equal consideration provision of Section 4(e) of the FPA.

In its letter of June 17, 2002, CDFG indicated it agreed with our reasoning relative to the trout fishery in the Mill Creek 2/3 bypassed reach. However, CDFG now recommends seasonally adjusted flows (4 cfs from August to October and 6 cfs for the remainder of the year) to develop riparian habitat, which would support recovery of the mountain yellow-legged frog. At the 10(j) meeting, we agreed to consider any new information provided by CDFG concerning the occurrence of the mountain yellow-legged frog in the Mill Creek 2/3 bypassed reach. CDFG may have information from its 2001 amphibian surveys and will be completing its 2002 surveys shortly. Following the 10(j) meeting, we agreed that CDFG would provide any new information from its surveys by August 30, 2002. By letter of August 26, 2002, CDFG indicated that it surveyed areas at Thurman Flats, Mountain Home Village, and upstream of the Mill 3 diversion on May 4, June 5, and August 14, 2002. While surveyors found numerous tadpoles in the Thurman Flats area and upstream of the Mill 3 diversion dam, they were not able to make any positive identifications of mountain yellow-legged frogs. CDFG intends to conduct surveys again in September 2002 and in the spring and summer of 2003. Therefore, this issue remains unresolved.